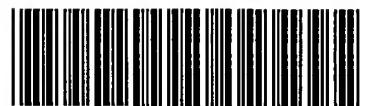


## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/583,218  
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/583,218

DATE: 02/28/2007

TIME: 14:17:47

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3 <110> APPLICANT: Applied Research Systems ARS Holding N.V.  
 5 <120> TITLE OF INVENTION: NOVEL CC-CHEMOKINE BINDING TICK PROTEINS  
 7 <130> FILE REFERENCE: W0956  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/583,218  
 C--> 9 <141> CURRENT FILING DATE: 2006-06-16  
 9 <150> PRIOR APPLICATION NUMBER: EP03104973.7  
 10 <151> PRIOR FILING DATE: 2003-12-24  
 12 <160> NUMBER OF SEQ ID NOS: 10  
 14 <170> SOFTWARE: PatentIn version 3.2  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 744  
 18 <212> TYPE: DNA  
 19 <213> ORGANISM: ectromelia virus  
 21 <400> SEQUENCE: 1  
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 24 cttcagcaat cattcgcatc ctcgtgtacg gaagaagaaa acaaccatca tatggaaatc 120  
 26 gatgttatta tcaaagtacac caagcaagac caaacaccga ctaatgataa gatttgtcaa 180  
 28 tcagtaaccg aagttacaga gtctgaagac gatgggtat ccgaagaagt cgtaaaagga 240  
 30 gatccccacca cttattacac tgcgtcggt ggaggtctga gaatgaactt tggattcacc 300  
 32 aaatgtcctc agattaaatc catctcagaa tccgctgatg gaaacacagt gaatgctcgg 360  
 34 ttgtcttagcg tctctccaat gtacggcatt gaatctccag ccatcactca tgaagaägct 420  
 36 cttgctatga tcaacgactg tgcgggtgtct atcaatatca aatgtatgtga agaagagaaa 480  
 38 gacagcaaca tcaagaccca tccagttactc gggcttaaca tctctcataa gaaagtgagg 540  
 40 tacgaagata tcatcggttc aacgatcgtc gatataaaat gtgtcaaggaa tctagagttt 600  
 42 agcgttcgta tcggagacat gtgcaaggaa gcatctgaac ttgaagtcaa ggatggattc 660  
 44 aagttatatcg acggatcggt atctgaaggt gcaaccgatg atacttcact catcgattca 720  
 46 acaaaaactca aacgcgtgtt ctga 744  
 49 <210> SEQ ID NO: 2  
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 51 <212> TYPE: PRT  
 52 <213> ORGANISM: ectromelia virus  
 54 <400> SEQUENCE: 2  
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 57 1 5 10 15  
 60 Ile Pro Thr Ser Leu Gln Gln Ser Phe Ala Ser Ser Cys Thr Glu Glu  
 61 20 25 30  
 64 Glu Asn Asn His His Met Gly Ile Asp Val Ile Ile Lys Val Thr Lys  
 65 35 40 45  
 68 Gln Asp Gln Thr Pro Thr Asn Asp Lys Ile Cys Gln Ser Val Thr Glu  
 69 50 55 60  
 72 Val Thr Glu Ser Glu Asp Asp Gly Val Ser Glu Glu Val Val Lys Gly  
 73 65 70 75 80  
 76 Asp Pro Thr Thr Tyr Tyr Thr Val Val Gly Gly Leu Arg Met Asn

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 80 Phe Gly Phe Thr Lys Cys Pro Gln Ile Lys Ser Ile Ser Glu Ser Ala  
 81 100 105 110  
 84 Asp Gly Asn Thr Val Asn Ala Arg Leu Ser Ser Val Ser Pro Met Tyr  
 85 115 120 125  
 88 Gly Ile Glu Ser Pro Ala Ile Thr His Glu Glu Ala Leu Ala Met Ile  
 89 130 135 140  
 92 Asn Asp Cys Ala Val Ser Ile Asn Ile Lys Cys Ser Glu Glu Glu Lys  
 93 145 150 155 160  
 96 Asp Ser Asn Ile Lys Thr His Pro Val Leu Gly Ser Asn Ile Ser His  
 97 165 170 175  
 100 Lys Lys Val Arg Tyr Glu Asp Ile Ile Gly Ser Thr Ile Val Asp Ile  
 101 180 185 190  
 104 Lys Cys Val Lys Asp Leu Glu Phe Ser Val Arg Ile Gly Asp Met Cys  
 105 195 200 205  
 108 Lys Glu Ala Ser Glu Leu Glu Val Lys Asp Gly Phe Lys Tyr Ile Asp  
 109 210 215 220  
 112 Gly Ser Val Ser Glu Gly Ala Thr Asp Asp Thr Ser Leu Ile Asp Ser  
 113 225 230 235 240  
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 117 245  
 120 <210> SEQ ID NO: 3  
 121 <211> LENGTH: 585  
 122 <212> TYPE: DNA  
 123 <213> ORGANISM: Rhipicephalus sanguineus  
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 126 ggccattacg gcccggggtc cttgcgcatt cgttagagc agcagctaa gtcttcgaag 60  
 128 atgcgcactt tcggggcttc tctttcgtt ctcctcgca ttatgtcgc ttactgtgac 120  
 130 gtcacaagac gccgcatac ttacgtgacc aaaaatgtga cggtcgaaaa cggtcgtgc 180  
 132 gtgtttgaac gcaacgtcat tccggatgtt gaaaccaaag cactgaacag cccatgcgtc 240  
 134 atttccacat gctatgcagc tgaccgtaaa gtgaactcga ctctctgccc gaacttcgga 300  
 136 gttgcggagg gctgcattgt ggagtggacc cccgatggtg aataccgaa ctgtgcggc 360  
 138 aagcatgtgt gccctacggc ccctgttaact tcttaatcgc atcacatctg cgaaaatgaa 420  
 140 acgtcgagac attctcttt atgccttaag aaatcaaact gcaacgtccg caaaaataca 480  
 142 tccccgcttc aaatacgaac aaaatgcagg atcaaatgct attaggttcc atgctgagtg 540  
 144 caagctaaaa taaacaactg aatcagcgtt taaaaaaaaaaaa 585  
 147 <210> SEQ ID NO: 4  
 148 <211> LENGTH: 111  
 149 <212> TYPE: PRT  
 150 <213> ORGANISM: Rhipicephalus sanguineus  
 152 <400> SEQUENCE: 4  
 154 Met Arg Thr Phe Gly Ala Ser Leu Phe Val Leu Leu Ala Ile Ser Val  
 155 1 5 10 15  
 158 Ala Tyr Cys Asp Val Gln Glu Arg Gly His Thr Tyr Val Thr Lys Asn  
 159 20 25 30  
 162 Val Thr Val Glu Asn Gly Ala Cys Val Phe Glu Arg Asn Val Ile Pro  
 163 35 40 45  
 166 Asp Gly Glu Thr Lys Ala Leu Asn Ser Pro Cys Val Ile Ser Thr Cys  
 167 50 55 60

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PATENT APPLICATION: US/10/583,218

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Output Set: N:\CRF4\02282007\J583218.raw

170 Tyr Ala Ala Asp Arg Lys Val Asn Ser Thr Leu Cys Pro Asn Phe Gly  
171 65 70 75 80  
174 Val Ala Glu Gly Cys His Val Glu Trp Thr Pro Asp Gly Glu Tyr Pro  
175 85 90 95  
178 Asn Cys Cys Pro Lys His Val Cys Pro Thr Ala Pro Val Thr Ser  
179 100 105 110  
182 <210> SEQ ID NO: 5  
183 <211> LENGTH: 420  
184 <212> TYPE: DNA  
185 <213> ORGANISM: Rhipicephalus sanguineus  
187 <400> SEQUENCE: 5  
188 gacgtccaag agcgccgcca tacttacgtg accaaaaatg tgacggtcga aaacgggtgcc 60  
190 tgcgtgtttg aacgcaacgt cattccggat ggtgaaacca aagcactgaa cagcccatgc 120  
192 gtcatttcca catgctatgc agctgaccgt aaagtgaact cgactctctg cccgaacttc 180  
194 ggagttgcgg agggctgcca tggatgtgg acccccgtg gtgaataccc gaactgctgc 240  
196 ccgaagcatg tggccctac gccccctgtt acttcttaat cgcatcacat ctgcgaaaat 300  
198 gaaacgtcga gacattcttc ttatgcctt aagaaattaa actgcaacgt ccgcaaaaat 360  
200 acatccccgc ttcaaatacg aacaaaatgc aggtcaaat gctatttagt ttcatgctga 420  
203 <210> SEQ ID NO: 6  
204 <211> LENGTH: 92  
205 <212> TYPE: PRT  
206 <213> ORGANISM: Rhipicephalus sanguineus  
208 <400> SEQUENCE: 6  
210 Asp Val Gln Glu Arg Gly His Thr Tyr Val Thr Lys Asn Val Thr Val  
211 1 5 10 15  
214 Glu Asn Gly Ala Cys Val Phe Glu Arg Asn Val Ile Pro Asp Gly Glu  
215 20 25 30  
218 Thr Lys Ala Leu Asn Ser Pro Cys Val Ile Ser Thr Cys Tyr Ala Ala  
219 35 40 45  
222 Asp Arg Lys Val Asn Ser Thr Leu Cys Pro Asn Phe Gly Val Ala Glu  
223 50 55 60  
226 Gly Cys His Val Glu Trp Thr Pro Asp Gly Glu Tyr Pro Asn Cys Cys  
227 65 70 75 80  
230 Pro Lys His Val Cys Pro Thr Ala Pro Val Thr Ser  
231 85 90  
234 <210> SEQ ID NO: 7  
235 <211> LENGTH: 515  
236 <212> TYPE: DNA  
237 <213> ORGANISM: Amblyomma variegatum  
239 <400> SEQUENCE: 7  
240 gttgagctag tgcaagctca ctttacgtc ctgtttcggg gcaagatcac acacccaaaa 60  
242 tgcgtgcgtc cggtgtttta gcctgtgtcg tagtcagtgt tgccgttagtc atccgcgaca 120  
244 tccaggaaca tggccactcc tacttgaaga ggaatgtgac tatagagaac ggtgcctgca 180  
246 tctatgagcg caacacactt cctgtatggtg aaaccaaggc actccacgac ccctgcgtca 240  
248 ttgcaacctg ctacgctgaa aggcgcgaag tgaatgccac cctgtgccca aacttcgggt 300  
250 tggatcctgg ttgttagggtg cagtggaccc ccgacggcat ctatccagaa tgctgcccga 360  
252 aacaagtgtg cgatggcaca aactgagtcg aatgcacatc ttttgcataat gcctgtttcg 420  
254 agctgccacg tccaaataca ctgatgactc caagttactc agccggaaaa ttcactttcc 480  
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PATENT APPLICATION: US/10/583,218

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TIME: 14:17:47

Input Set : N:\efs\02\_28\_07\10583218\_efs\seq-list.txt  
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259 <210> SEQ ID NO: 8  
260 <211> LENGTH: 108  
261 <212> TYPE: PRT  
262 <213> ORGANISM: Amblyomma variegatum  
264 <400> SEQUENCE: 8  
266 Met Arg Ala Leu Val Ala Leu Ala Cys Val Val Val Ser Val Ala Val  
267 1 5 10 15  
270 Val Ile Gly Asp Ile Gln Glu His Gly His Ser Tyr Leu Lys Arg Asn  
271 20 25 30  
274 Val Thr Ile Glu Asn Gly Ala Cys Ile Tyr Glu Arg Asn Thr Leu Pro  
275 35 40 45  
278 Asp Gly Glu Thr Lys Ala Leu His Asp Pro Cys Val Ile Ala Thr Cys  
279 50 55 60  
282 Tyr Ala Glu Arg Arg Glu Val Asn Ala Thr Leu Cys Pro Asn Phe Gly  
283 65 70 75 80  
286 Val Asp Pro Gly Cys Arg Val Gln Trp Thr Pro Asp Gly Ile Tyr Pro  
287 85 90 95  
290 Glu Cys Cys Pro Lys Gln Val Cys Asp Gly Thr Asn  
291 100 105  
294 <210> SEQ ID NO: 9  
295 <211> LENGTH: 396  
296 <212> TYPE: DNA  
297 <213> ORGANISM: Ixodes scapularis  
299 <400> SEQUENCE: 9  
300 atgagggtcaa tcgttctatg ggctctgatc gccttggag gtgtgccact tctcatggga 60  
302 gccgctaattt aaagccaccc ttatggagg tcatttaata acggtacatg tacgtaccga 120  
304 aatataacgc tgagagatgg agactctgaa cctttcaat acccatgtga atattggaat 180  
306 tgcaatgtta cagcaagaac actaactatt gaggggtgcg gtgtccacg atacggaagt 240  
308 tgcctgtacg tgcacaattt taatttctac tggcctcttt gctgtcgcat gagtcgtctc 300  
310 tggtaaaaca attaactaat ttaccttcac ttctatcaga acactttgct ggtaaataaa 360  
312 aaaagaaaaac aacaaaaaaaaaaaaaaa aaaaaaaaaa 396  
315 <210> SEQ ID NO: 10  
316 <211> LENGTH: 101  
317 <212> TYPE: PRT  
318 <213> ORGANISM: Ixodes scapularis  
320 <400> SEQUENCE: 10  
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323 1 5 10 15  
326 Leu Leu Met Gly Ala Ala Asn Gln Ser His Pro Tyr Gly Val Ser Phe  
327 20 25 30  
330 Asn Asn Gly Thr Cys Thr Tyr Arg Asn Ile Thr Leu Arg Asp Gly Asp  
331 35 40 45  
334 Ser Glu Pro Phe Gln Tyr Pro Cys Glu Tyr Trp Asn Cys Asn Val Thr  
335 50 55 60  
338 Ala Arg Thr Leu Thr Ile Glu Gly Cys Gly Val Pro Arg Tyr Gly Ser  
339 65 70 75 80  
342 Cys Leu Tyr Val His Asn Tyr Asn Phe Tyr Trp Pro Leu Cys Cys Arg  
343 85 90 95  
346 Met Ser Arg Leu Cys

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Input Set : N:\efs\02\_28\_07\10583218\_efs\seq-list.txt  
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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/583,218

DATE: 02/28/2007

TIME: 14:17:48

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L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date